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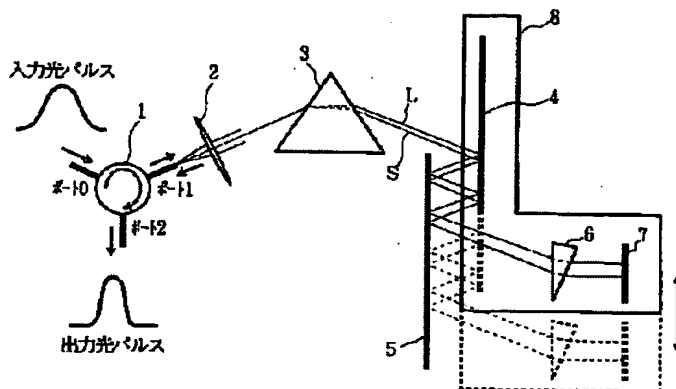
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APPLICANT : NEC CORP;

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TITLE : DISPERSION COMPENSATOR



ABSTRACT : PROBLEM TO BE SOLVED: To obtain a dispersion compensator which can avoid transmission characteristics deterioration caused by a nonlinear optical effect and the ripple of a group delay characteristics and vary dispersion compensation quantity and is also easily made small-sized.

SOLUTION: This compensator is provided with an optical circulator for outputting an input optical pulse from a port 0 to a port 1, a collimation lens for collimating its output light, a prism for dispersing a wavelength component included in the input optical pulse, 1st and 2nd reflectors parallelly arranged so as to perform multiple reflection of a light beam including each dispersed wavelength component, a wedge-shaped prism on which the light beam subjected to multiple reflection is made incident at a prescribed incidence angle and which collimates and outputs the light beam, and a 3rd reflector on which the output light of the wedge-shaped prism is made incident at the incidence angle of 90° and which reflects the output light, inputs the reflected light to the port 1 of the optical circulator through the wedge-shaped prism, the 1st and 2nd reflectors, the prism and the collimation lens and outputs the reflected light as an output optical pulse that compensates for the wavelength dispersion of an optical fiber transmission line.

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